Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
WASHINGTON 25, D. C.

In Cooperation with State, Federal and other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING JULY 19, 1947
(Eighth Cotton Insect Survey Report for 1947)

CALCIUM ARSENATE SUPPLY

Confidential data supplied by 12 companies in response to wire request of Agricultural Insecticide and Fungicide Association on July 17, 1947, together with other available information permits following summary on current season's supply of calcium arsenate:

Carryover from last season in dealers' hands	Negligible
Production October 1, 1946 to July 15, 1947, less export	24,000,000 pounds
Production July 15, 1947 to August 1, 1947	7,000,000 pounds
Available for grower use by August 10, 1947	31,000,000 pounds
Production August 1947 (largely first half of month)	5,400,000 pounds
Available for use during 1947 season	36,400,000 pounds

The estimated total of 36,400,000 pounds available for season is less than use during season of average infestation. The distribution of current season's supplies has been to areas where the need has been greatest. Recent shipments sent into the areas of pressing current needs should materially aid in meeting current needs. It will not fully meet demands there or in other areas of less pressing needs.

Current data indicate that approximately 2,000,000 pounds of production between July 15 and August 15 not committed.

Supply of calcium arsenate is tight. Present information does not, however, justify modification of current season's expression on use of new insecticides for cotton insect control. Production of the new insecticides has increased somewhat and where grower demand or actual need exists moderate additional amounts may be made available.

It is very important that reporters critically distinguish between need and demand. Effort should be made to appraise and anticipate needs and promptly report situations with full data, including names of dealers and normal suppliers. This should aid in distributing available supply in the best interests of crop protection. —S. A. Rohwer, July 22, 1947.

This was the first week this summer when weather conditions were generally unfavorable for weevil development. In most of the States hot, dry weather helped greatly in checking the boll weevil. General rains occurred east of the Mississippi River the middle of the week, which were followed by mild temperatures. The boll weevil situation continues critical in most of North Carolina, South Carolina, Georgia, Alabama, and Mississippi, and in some areas in Louisiana, Arkansas, Texas, and Oklahoma. All cotton growers should be prepared to dust with insecticides when weevils become abundant, if the prospects are good that a satisfactory crop can be made if weevils are controlled.

Conditions have been favorable for cotton in most areas. Soil moisture has been adequate for plant growth. In spite of heavy weevil infestations in the Southeastern States, the cotton prospects seem to be from fair to excellent over large areas. Much credit for this favorable situation must be given the plant breeders who have developed the rapid-fruiting, high-yielding, early-maturing varieties that are now generally planted. The high price of cotton has stimulated greater attention to the proper use of insecticides, and in some States they have been used more extensively than during any previous year. There have been enough days of hot, dry weather in most localities to kill large numbers of boll weevils. Beneficial predators and parasites are always present and often do more good in checking outbreaks of insect pests than is generally realized.

Serious bollworm infestations have been reported from Georgia, Alabama, Mississippi, and Louisiana, with lighter infestations reported from most of the other States.

The cotton aphid situation is on the border of becoming critical in Georgia, Alabama, Louisiana, and Arkansas, especially in fields that have been dusted with calcium arsenate, but aphids have also been reported from fields that were not dusted. Nicotine and mixtures of nicotine and calcium arsenate are scarce.

No serious outbreaks of the cotton leafworm have been reported. The only cotton leafworms recorded this year came from Calhoun and Nueces Counties, Texas, in June.

INSECTICIDES

W. A. Ruffin, Extension Entomologist, Auburn, Alabama, wrote on July 15 that he was in contact with salesmen representing three large insecticide manufacturers last week, who advised him that they did not have any calcium arsenate. He wrote, "The supply in the hands of dealers is completely exhausted, and at the present time I do not know where any calcium arsenate can be obtained. The situation on nicotine is the same as it is with the calcium arsenate."

L. C. Murphree, Extension Entomologist, State College, Mississippi, reported on July 15: "Due to the increased number of farmers planning to poison in the hill section, we have a shortage of the nicotine-calcium arsenate dust."

James T. Conner, Jr., Extension Entomologist, Raleigh, North Carolina, reported on July 15 that supplies of insecticides, including calcium arsenate and some of the new organic materials, are moving into the State for use against cotton insects. Shortages of dusting equipment were reported from Johnson County and there are shortages of dusting equipment in other counties, and inadequate equipment is being used in some places.

On July 18, R. C. Gaines, Tallulah, Louisiana, reported: "Supply of calcium arsenate is limited."

BOLL WEEVIL

VIRGINIA: J. O. Rowell, Extension Entomologist, Blacksburg, wrote on July 17: "Some few reports have reached me recently to the effect that weevils are present in our southern cotton-producing counties."

On July 21, W. Don Fronk, Assistant Entomologist, Virginia Agricultural Experiment Station, examined two cotton fields in Nansemond County and reported 4% punctured squares in one field and 9% in the other. Just south of Virginia, in Halifax, Hertford, and Northampton Counties, North Carolina, entomologists found weevils in all of the 21 fields examined, with infestations exceeding 25% punctured squares in 15 fields and with more than 50% of the squares punctured in 3 fields.

NORTH CAROLINA: Continued mild temperatures and rains were favorable for weevil development and cotton growth. There was little change in the square infestation due to rapid fruiting of the plants. Punctured squares were found in all fields examined. The average infestation in 116 fields examined in 19 counties was 32% punctured squares as compared to 34% the previous week. In 9 fields less than 10% of the squares were punctured; in 34 fields the infestation was from 10 to 25%; in 56 fields from 25 to 50%; and in 17 fields, in Johnson, Sampson, Wayne, Greene, Wilson, Edgecombe, Halifax, Northampton, Scotland, Hoke, and Union Counties, more than 50% of the squares were punctured.

SOUTH CAROLINA: Weather conditions continued favorable for boll weevil development. Mild temperatures and rains were general over the State. Infestations increased rapidly toward the end of the week. The cotton in the Piedmont section is now fruiting rapidly, but boll weevil damage is increasing. The boll weevil situation in South Carolina now is worse than at mid-July in any year since 1941. The average percent of punctured squares for comparable periods since 1938 follows:

Year	Percent	Year	Percent
1947	38	1942	23
1946	20	1941	75*
1945	24	1940	1*
1944	19	1939	51*
1943	19	1938	33*

*Florence County only.

The average boll weevil infestation in 146 fields in 19 Piedmont and 3 Coastal Plains counties was 38% punctured squares. Weevil infestation was found in all fields examined. In three counties--Saluda, Darlington, and Florence--the average infestation was less than 30% punctured squares; 13 counties averaged between 30 and 40%; 5 counties--Union, Edgefield, McCormick, Abbeville, and Sumter--averaged between 45 and 50%; and 1 county-Oconee--in the upper Piedmont averaged 51% punctured squares.

C. R. Jordan, Jr., Assistant Extension Entomologist, reported on July 21 that 159 fields examined by county agents in 34 counties had an average of 30% punctured squares. He stated that "The fight is now between the boll weevil and the farmer. In the lower counties the fight is to protect the young bolls, while in the Piedmont it is to get a crop of bolls set and then protect them from the boll weevil. Dust applications to protect the bolls will likely be more profitable than earlier applications in the lower counties, while the only chance that most Piedmont farmers have to set a crop of bolls is to start a vigorous dusting campaign now."

GEORGIA: Boll weevils were found in all of the 107 fields examined in 54 counties, but the situation does not seem to be as serious as during previous weeks. In only 25% of the fields examined were more than 30% of the squares punctured; and in only 10% of the fields were over 50% of the squares punctured. In 28% of the fields examined the infestations did not exceed 10%, and in 75% of the fields the infestations did not exceed 30% punctured squares. Fields with more than 50% punctured squares were reported in Chandler, Crisp, Dooly, Mitchell, Montgomery, Sumter, Tift, Toombs, and Wilcox Counties.

Although weevils were found in all of the 27 fields examined in 17 counties in the northern half of the State, the highest infestations reported were 38% punctured squares in a field in Franklin County and 33% punctured squares in a field in Jackson County. Fields with more than 20% punctured squares were reported in Banks, Bartow, Cobb, Franklin, Hart, and Polk Counties.

P. M. Gilmer, Tifton, states that there has been a remarkable increase in the amount of poison used and in the number of farms on which cotton is poisoned for boll weevil control. Much of the cotton in the southwestern counties is being poisoned, some of it too heavily poisoned. In the northeastern Coastal Plains counties--such as Burke, Screven, and Jenkins--a heavy poison program has been carried out. In the middle counties--such as Laurens, Pulaski, Wilkinson, Dodge, and Wheeler--a high percentage of the cotton has been poisoned. This week's records indicate good weevil control on poisoned cotton in all of these areas and a remarkable record from Laurens County, where almost 100% of the cotton is being poisoned.

FLORIDA: No boll weevils were found in the examination of cotton fields at Worthington Springs (Union County) and Leesburg (Lake County). In 3 fields at Evinston (Alachua County) that had been treated with insecticides for boll weevil control, the infestations were 18%, 21%, and 32% punctured squares. The previous week the infestations in these fields ranged from 29 to 47% punctured squares.

ALABAMA: W. A. Ruffin, Extension Entomologist, Auburn, wrote on July 15: "Insects in the cotton fields continue to be a real problem. Since Saturday morning I have had long distance telephone calls from county agents and farmers from Huntsville, Madison County, to the Gulf. In spite of the fact that we have had three weeks with little or no rainfall the weevil infestation continues to run above 25% punctured squares. Last week in Coosa County, I found a number of fields where infestation ran, for practical purposes, 100%. With reference to the weevil situation at the present time as compared to last year, I would say that up to date we have many more weevils and the damage has been greater than it was in 1946." On July 21 he wired: "Examined cotton in forty fields southeast Alabama last week. Infestation in fields that had been dusted averaged 16% and in untreated fields it averaged 47%."

MISSISSIPPI: Dr. Clay Lyle, Entomologist of the State Plant Board and Experiment Station, stated on July 21 that "The boll weevil infestations in Mississippi continued on a high level during the past week in spite of heavy fruiting in most cotton." His statement was based on the fact that boll weevils were found in 168 of the 243 fields examined in 40 counties, with an average of 24% of the squares punctured as compared to 26% the previous week and 18% during the same week last year. The average infestation of all fields examined in Mississippi last week was 17% as compared to 12% one year ago. Fields with more than 70% of the squares punctured were reported from Chickasaw, Holmes, Itawamba, Lee, and Warren Counties. Reports of fields with more than 40% punctured squares were received from Humphreys, Issaquena, Jones, Marion, Sharkey, Washington, and Yazoo Counties.

In 13 Delta counties weevils were found in slightly more than half of the fields examined, as 79 of the fields were infested and 75 were still free of weevils. No weevils were in the 11 fields examined in Quitman and Tallahatchie Counties. Most of the fields examined in Bolivar, Coahoma, Humphreys, Leflore, Sharkey, Sunflower, and Washington Counties were free of weevils. All of the 21 fields examined in Issaquena and Warren Counties were infested. The situation is especially serious in Warren County where the infestations ranged from 50 to 82% punctured squares. In 9 of the 15 fields examined in Issaquena County the infestations ranged from 30 to 68% punctured squares. The boll weevil situation is also serious in Holmes and Yazoo Counties.

B. J. Young of the Delta and Pine Land Company, Scott, reported on July 17 that weevils were found in 176 of the 181 fields examined in the southern part of Bolivar County, but the highest infestation was 51%. The next highest infestation was 44% punctured squares. Only 15 fields had more than 25% of the squares punctured. No weevils were found in 5 fields, and in 117 fields the infestation did not exceed 10% punctured squares. Mr. Young stated "Cotton generally is beginning to fruit better, except on buckshot land which still needs more rain. Weevils are general in practically every cut and poisoning will probably start at the end of the month."

TENNESSEE: No reports about the boll weevil have been received from Tennessee, but it is probable that many of the cotton fields along the southern border of the State are now infested, as all of the 5 fields examined in DeSoto and Tishomingo Counties, Mississippi, adjacent to the Tennessee line were infested with weevils. The infestations varied from 4 to 34% punctured squares.

LOUISIANA: Hot, dry weather was unfavorable for weevils in the cotton-producing areas of the State. Temperatures of 95° F., or above, occurred in most areas. Cotton made good growth and is setting squares rapidly. The average infestation in 274 fields in 13 parishes was 21% as compared to 17% last week and 49% a year ago. In 4% of the fields no punctured squares were found; in 36% of the fields the infestation was less than 10%; in 33% of the fields the infestation ranged from 10 to 25%; in 22% of the fields it was from 25 to 50%; and in 5% of the fields in Red River, Bossier, Tensas, Grant, and Madison Parishes more than 50% of the squares were punctured.

ARKANSAS: Dr. Charles Lincoln, Extension Entomologist, Fayetteville, issued a statement on July 16 that was, in part, as follows: "Dry weather is exerting natural control of boll weevil. In many fields weevils are in the egg, grub, and pupal stages in squares. In these fields overwintered weevils have died off and first brood has not started to emerge.

"In early fields first brood weevils are emerging and are actively puncturing squares. In many of these fields dry weather is reducing continued emergence of new weevils. As a result the population is leveling off.

"Dusting should be done cautiously. In most cases wait for rain. If it continues dry, dusting will not be necessary. Some fields even with 35 or 40% punctured squares from first brood weevils do not require dusting because the population of weevils is static and not rising."

The average boll weevil infestation in 45 fields in 5 southeastern counties was 30%. No punctured squares were found in 2% of the fields. In 22% of the fields less than 10% of the squares were punctured; in 31% of the fields the infestation was from 10 to 25%; in 20% of the fields it was from 25 to 50%; and in 25% of the fields in Chicot, Ashley, and Desha Counties more than 50% of the squares were punctured.

Dwight Isely, Entomologist, University of Arkansas, Fayetteville, reported July 18: "On my return from McGehee, we scouted the narrow bottoms along the Arkansas River in Pope and Conway Counties. In the fields we scouted, the infestations were heavy, running from 40 5o 80%. There were no local infestations."

TEXAS: Hot, dry weather prevailed throughout the State. At Waco in central Texas maximum temperatures ranged from 95° to 103° F., with an average of 99° F. Local rains and showers occurred the latter part of the week, breading the high temperatures and droughty conditions in isolated local areas. Boll weevil infestations continued low with a slight reduction from last week. The average weevil infestation in 740 fields in 43 counties was 12% punctured squares as compared to 15% the previous week. In 97 fields no punctured squares were found; in 314 fields less than 10% of the squares were punctured; in 233 fields the infestation was from 10 to 25%; in 75 fields it was from 25 to 50%; and in 21 fields in Ellis, Lamar, Grayson, Fannin, Denton, Red River, Bowie, Wharton, Robertson, Refugio, Nueces, and San Patricio Counties more than 50% of the squares were punctured.

OKLAHOMA: C. F. Stiles, Extension Entomologist, Stillwater, reported on July 14: "The boll weevil infestation in the State continues to increase." On July 19 he reported: "The boll weevil square infestation declined somewhat over the State during the week ending July 19. This was mainly due to increased squaring and dying off of the old weevils. The weather was hot, dry and windy from Sunday through Thursday. Temperatures reached the 100 degree mark at all of the crop reporting stations in the important cotton producing counties. Some stations reported as high as 108 degrees on Thursday. Boll weevil grubs in the fallen squares suffered high mortality during the first five days of the week. Farmers are urged to make at least two square infestation counts each week to determine the percentage of infestation. Apply calcium arsenate dust only when infestation is 10 percent or above. Supplies of calcium arsenate are being exhausted in some states."

The average square infestation in 149 fields in 19 counties was 19% punctured squares as compared to 37% the previous week. No punctured squares were found in 9 fields; in 53 fields the infestation was less than 10%; in 44 fields the infestation was from 10 to 25%; in 35 fields it was from 25 to 50%; and in 8 fields in Creek, Garvin, Logan, Cleveland, McClain, Sequoyah, Caddo, Logan, and Comanche Counties more than 50% of the squares were punctured.

Mr. Stiles reported the average boll weevil infestation in 3 dusted fields in Garvin County was 17%, while the one undusted field examined had 71% punctured squares. In Love County the average infestation in 3 undusted fields was 30% punctured squares, while in 1 dusted field only 11% of the squares were punctured.

BOLLWORM

SOUTH CAROLINA: Bollworm damage has been noted in several South Carolina counties, with Aiken County reporting heavy damage in some fields. In general, the infestations thus far are relatively light.

GEORGIA: Bollworms have appeared in damaging numbers in many cotton fields in the Coastal Plains section and control measures are being applied. Infestations are increasing in the north Coastal Plains and southern Piedmont counties.

ALABAMA: W. A. Ruffin, Extension Entomologist, Auburn, wrote on July 15: "The bollworms are puncturing the squares in many fields in central and south Alabama and are actually causing more damage than the boll weevils." On July 21 he reported bollworms causing serious damage in many fields.

MISSISSIPPI: Dr. Clay Lyle, Entomologist of the State Plant Board and Experiment Station, stated on July 21 that bollworms are causing severe injury in some south Mississippi counties and advised dusting with sulfur dust containing 10% DDT, using 10 to 15 pounds per acre and making a second application 5 days later if needed. He stated that if the DDT-sulfur mixture is not available, cryolite at the same rate will be very effective if the worms are small.

F. F. Bibby, Tremont, Itawamba County, in the northeastern section of the State, reported on July 15 that the first brood of bollworms in cotton is less than a week old and a few fields are being slightly damaged.

E. W. Dunnam and S. L. Calhoun, Stoneville, reported that in the examination of 121 Delta fields during the past week, bollworms were noted in 10 fields.

LOUISIANA: W. S. McGregor, Extension Entomologist, reported heavy bollworm infestations in Rapides and Avoyelles Parishes, where insecticides have been used for their control in a number of fields. In Bossier, Caddo, and Natchitoches Parishes an average of 2% of the squares were injured by bollworms, but in some fields as many as 16% of the squares were injured. In northeastern Louisiana a few bollworms were noted in most of the fields.

ARKANSAS: Dr. Charles Lincoln, Extension Entomologist, Fayetteville, reported on July 16: "Apparently as a result of failure of farmers to plant early corn, there has been some second generation activity of bollworm in cotton. Heretofore damage to cotton has always been from the third brood after the middle of July. Apparently natural enemies are handling these early worms. The real danger period is just beginning. For the next month cotton not protected by silking corn is in danger. In such cases, building up aphid populations by dusting may precipitate bollworm damage."

TEXAS: Bollworms are scattering and damaging infestations are very few. They were found in 289 of the 770 fields examined in 43 counties.

OKLAHOMA: Bollworm eggs and a few young worms were found in Garvin and Sequoyah Counties.

COTTON APHID

GEORGIA: Aphid populations are increasing, especially in fields that have been dusted with calcium arsenate for weevil control. The populations vary from light to very heavy, with heavy infestation in the majority of the fields.

ALABAMA: W. A. Ruffin, Extension Entomologist, Auburn, wrote on July 15: "Aphids are numerous in undusted fields. Fields that have been dusted with calcium arsenate two or more times are heavily infested with aphids. In fields which we are using for demonstrations in testing Toxaphene, benzene hexachloride-DDT, and calcium arsenate we have found that with two applications of benzene hexachloride plus DDT and with Toxaphene, we have gotten excellent control of aphids and the bollworm." On July 21, he reported aphids causing damage in many fields.

MISSISSIPPI: Aphids noted in some cotton fields.

LOUISIANA: Aphids have increased rapidly in a number of fields which have been poisoned several times for boll weevil control.

ARKANSAS: Dr. Charles Lincoln, Extension Entomologist, Fayetteville, reported on July 16: "Dusted cotton shows a rising population of aphids in Desha and Chicot Counties. If this is any indication, aphids may be expected to build up after dusting with calcium arsenate or DDT. DO NOT UNDERTAKE GENERAL COTTON DUSTING UNLESS APHICIDES ARE IN SIGHT. The aphid outlook is a strong argument for avoiding unnecessary dusting at present.

"Leaflet No. 52, Revised 1947, 'Spot Dusting for Boll Weevil Control,' gives recommendations for control of aphids with nicotine. Nicotine is scarce. Rotenone and BHC are materials that may be used in place of nicotine. Rotenone must be applied from below because it kills aphids on direct contact only. It has no fuming action. If ground machinery can be adapted to give good coverage of undersides of leaves, good aphid control can be obtained. Add derris or cube root to calcium arsenate to give an actual rotenone content of ½ of 1%. At this strength it should be used in alternate applications as a preventive. At 3/4 of 1% rotenone may be used as a knock-out, provided coverage is good.

"BHC is one of the newer insecticides. It has good fuming action. BHC dust may be used as an aphid knock-out. After aphid populations show a definite rise but before there is any damage, substitute one application of BHC dust, containing 5% gamma isomer, for one application of calcium arsenate."

TEXAS: K. P. Ewing reports that aphids continue scarce, except in a few dusted fields. Light infestations were noted in 403 of the 770 fields examined in 43 counties.

COTTON FLEAHOPPER, TARNISHED PLANT BUG, RAPID PLANT BUG, AND OTHER MIRIDAE THAT ARE PESTS OF COTTON

MISSISSIPPI: F. F. Bibby, Tremont, Itawamba County, reported on July 15 that there was much evidence of early damage by Miridae. By mid-July the rapid plant bug, Adelphocoris rapidus (Say), the tarnished plant bug, Lygus oblineatus (Say), and Neurocolpus nubilus were more abundant than the cotton fleahopper, Psallus seriatus (Reut.). There is now but little blasting of the tiny squares.

E. W. Dunnam and S. L. Calhoun, Stoneville, reported that in the examination of 121 fields in 13 Delta counties, tarnished plant bugs were noted in 11 fields, rapid plant bugs in 12 fields, Neurocolpus nubilus in 1 field, and cotton fleahoppers in 3 fields.

ARKANSAS: Dr. Charles Lincoln, Extension Entomologist, Fayetteville, reported on July 16: "In many fields cotton is shedding small squares. Most of this is natural shed. There is some cotton fleahopper in the Red River bottoms and possibly in other parts of southwestern Arkansas. In eastern Arkansas there is some tarnished plant bug injury. In most of the fields examined the shedding is not due to insects.

"Dusting for hopper or plant bug control should be undertaken only after definitely establishing the presence of large populations of cotton fleahopper or tarnished plant bug. Dusting with 5% DDT for plant bug or hopper control will increase aphid populations, interfering with dusting for boll weevils later in the season. If dusting is necessary, sulfur will prove safer because it does not encourage aphids."

TEXAS: Cotton fleahopper infestations are persisting in scattering fields throughout central and north-central areas, and have increased rapidly in some fields in the northwestern part of the State.

OKLAHOMA: C. F. Stiles, Extension Entomologist, Stillwater, reported "Fleahopper infestation remains light over the State."

RED SPIDER

ALABAMA: W. A. Ruffin, Extension Entomologist, Auburn, wired July 21: "Red spiders are common."

ARIZONA: Red spider infestations were reported July 21 in several cotton fields near Mesa, that had been dusted with DDT. No sulfur had been used in the DDT.

MISCELLANEOUS INSECTS

Garden Webworm (*Loxostege similalis* (Guen.): For several weeks there have been reports in regard to the garden webworm injuring cotton in Arkansas, Louisiana, and Mississippi. The first specimens actually submitted for verification were sent in by E. W. Dunnam on July 16. His determination was verified by H. W. Capps. Dr. Dunnam wrote that several dozen worms were taken from three corn plants brought in by Mr. George D. Andrews, Hollandale (Washington County), Mississippi, who reported that the insects were also eating cotton in an adjoining field. Dr. Dunnam added, "We are receiving two or three calls per day about this insect damaging young cotton in low places. This is the first complaint we have had concerning its damage to corn."

INSECTS ON IRRIGATED COTTON OF THE SOUTHWEST

ARIZONA: Cotton dusting and spraying was continued on a large scale in most of the Salt River Valley. Many fields have been treated twice and some have received the third treatment. There was little change in *Lygus* populations on cotton generally, but in all fields recently dusted or sprayed, the populations of *Lygus* and other injurious Hemiptera were greatly reduced. There was a slight increase in stink bug populations in most areas.

In Pinal County, aphid infestations were reported in many fields in the Eloy area. Benzene hexachloride is being used for their control. Stink bugs were reported in a few fields. In the Casa Grande area, injurious hemipterous insect populations varied from 0.1 to 25 per 100 net strokes. *Lygus* and cotton fleahoppers predominated.

The heavy cotton fleahopper infestation in the Marana area of the Santa Cruz Valley was checked by one application of 5% DDT and sulfur. Aphid populations are building up rapidly in a few fields and threaten to become serious. A few bollworms have been noted in this area. In the Sahuarita area cotton fleahoppers were found at an average rate of 20 per 100 sweeps in 5 representative fields.

L. S. Owen, County Agent, Graham County, reported serious stink bug injury to cotton in the Safford Valley. He stated that counts as high as 9 stink bugs per 100 net strokes had been found in some fields.

NEW MEXICO: Sweepings made in 7 fields in Dona Ana County showed populations ranging from 1 to 14 injurious Hemiptera per 100 net strokes. *Lygus* spp. predominated, but a few stink bugs, *Thyanta custator*, were collected.

TEXAS: There was little change in hemipterous insect populations on cotton in the El Paso Valley. The populations decreased in some fields, but increased in others near alfalfa grown for seed. The average injurious species was 8.8 per 100 sweeps this week as compared to 9.9 the previous week.

Prepared JULY 24, 1947.

U. S. DEPARTMENT OF AGRICULTURE
AUG 1 1947
CURRENT SERIAL RECORD
LIBRARY